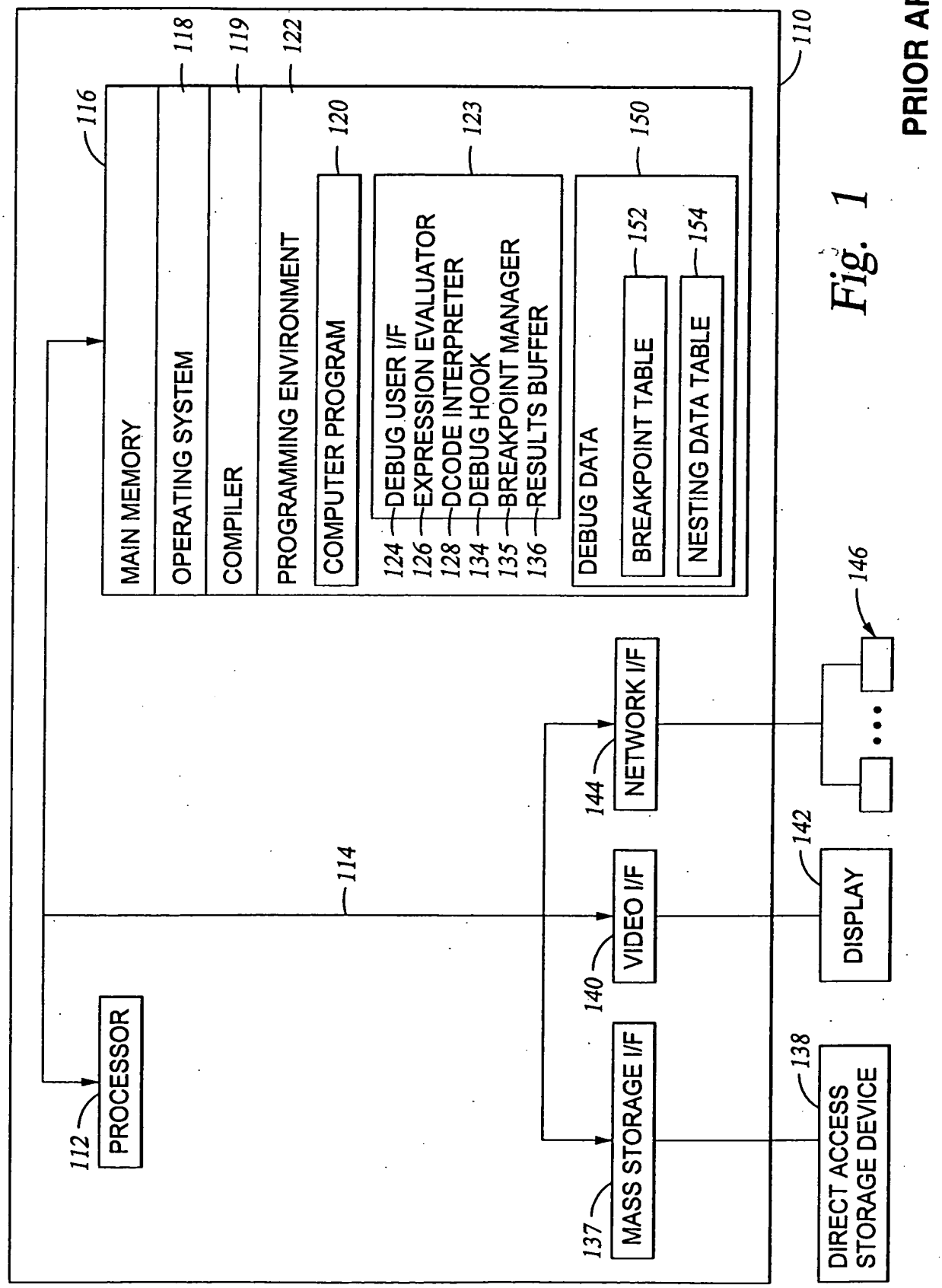


PRIOR ART

Fig. 1

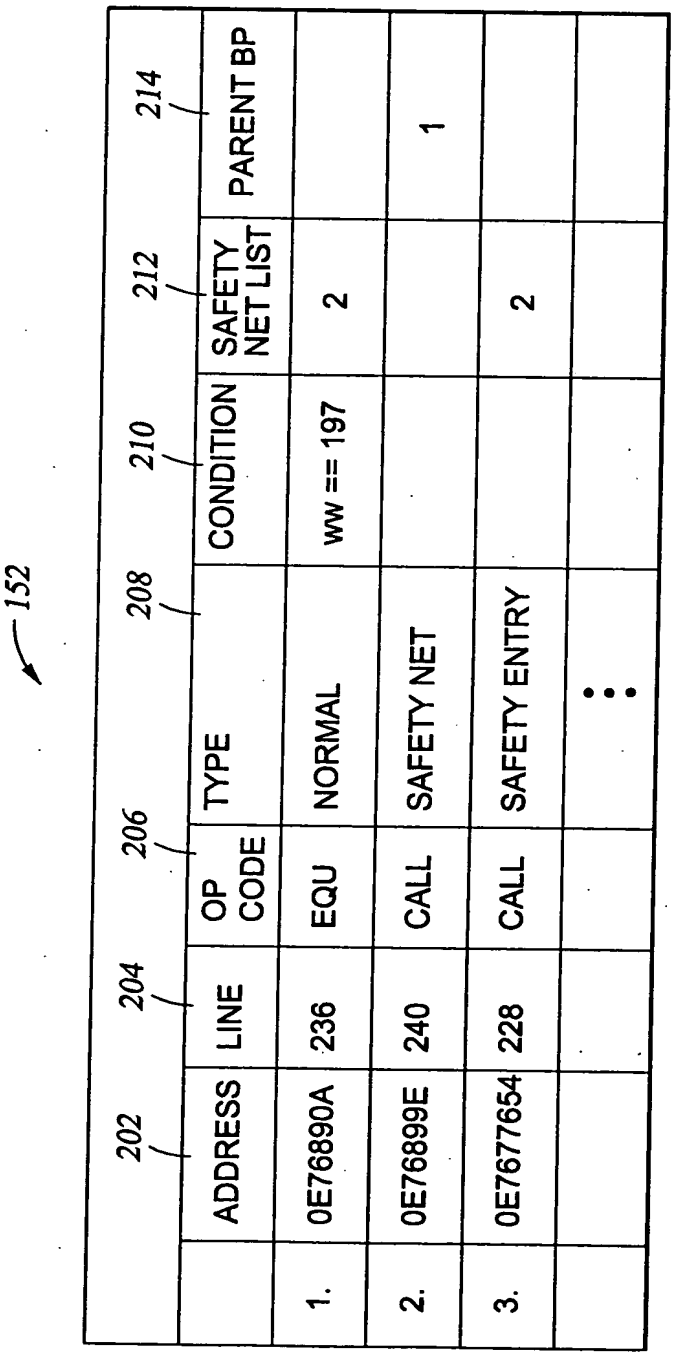

152
202
204
206
208
210
212
214
ADDRESS
LINE
OP CODE
TYPE
CONDITION
SAFETY NET LIST
PARENT BP
1.
0E76890A
236
EQU
NORMAL
ww == 197
2
2.
0E76899E
240
CALL
SAFETY NET
1
3.
0E7677654
228
CALL
SAFETY ENTRY
2

Fig. 2

154

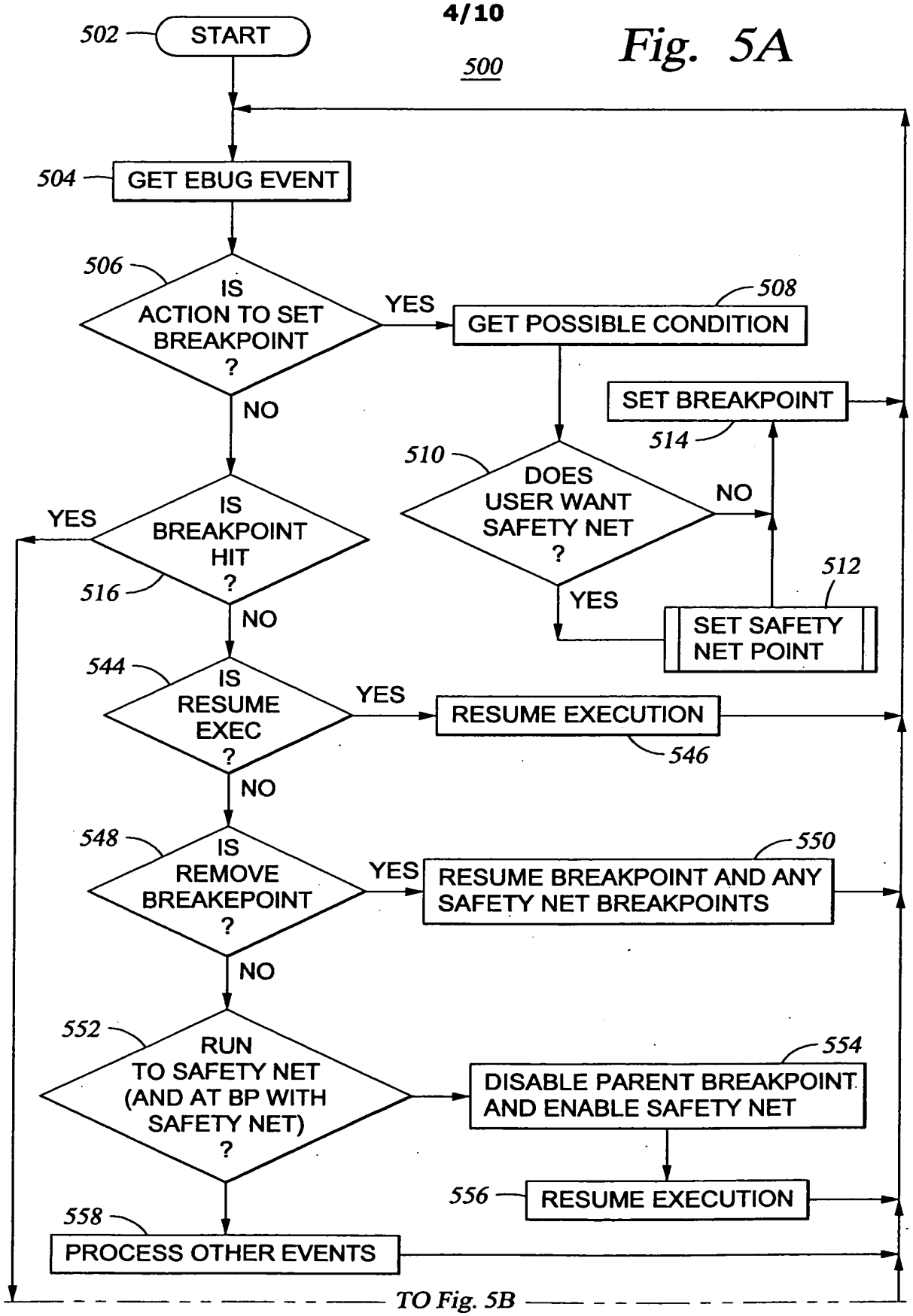
NESTING DATA		
302	304	306
NEST RANGE	ENTRY POSITIONS	EXIT POSITIONS
234, 237	233	238
229, 239	228	240
225, 241	224	242
	⋮	

Fig. 3

```
224
225  for ( i = 1; i < 100; i++ )
226  {
227      k = i;
228      foo(&k);
229      for ( j = 2; j < 200; j++ )
230      {
231          l = foo22( j + k );
232          ww = 1 / 22;
233          if ( ww == 199 )
234          while( str[ww]  l = 0 )
235          {
236              str[ww] = string_upper(str[ww++]);
237          }
238          foo3(ww);
239      }
240      foo(ww);
241  }
242
```

Fig. 4

Fig. 5A


500
502
START
504
GET EBUG EVENT
506
IS ACTION TO SET BREAKPOINT ?
YES
508
GET POSSIBLE CONDITION
NO
SET BREAKPOINT
514
510
DOES USER WANT SAFETY NET ?
NO
YES
IS BREAKPOINT HIT ?
516
YES
512
SET SAFETY NET POINT
NO
544
IS RESUME EXEC ?
YES
RESUME EXECUTION
546
NO
548
IS REMOVE BREAKEPOINT ?
YES
550
RESUME BREAKPOINT AND ANY SAFETY NET BREAKPOINTS
NO
552
RUN TO SAFETY NET (AND AT BP WITH SAFETY NET) ?
554
DISABLE PARENT BREAKPOINT AND ENABLE SAFETY NET
556
RESUME EXECUTION
558
PROCESS OTHER EVENTS
TO Fig. 5B

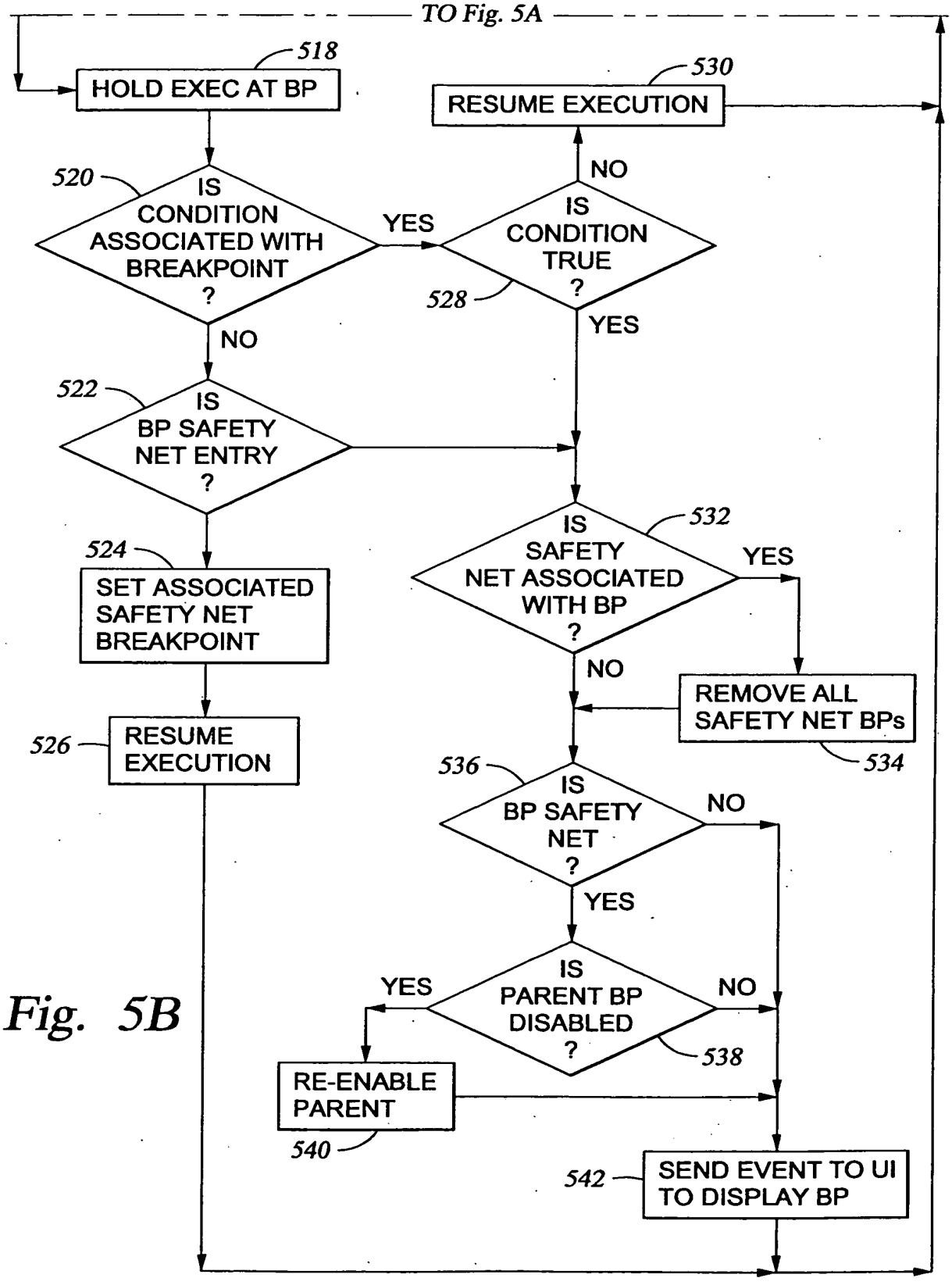

TO Fig. 5A
518
HOLD EXEC AT BP
520
IS CONDITION ASSOCIATED WITH BREAKPOINT ?
YES
NO
528
IS CONDITION TRUE ?
NO
YES
530
RESUME EXECUTION
522
IS BP SAFETY NET ENTRY ?
524
SET ASSOCIATED SAFETY NET BREAKPOINT
526
RESUME EXECUTION
532
IS SAFETY NET ASSOCIATED WITH BP ?
YES
NO
REMOVE ALL SAFETY NET BPs
534
536
IS BP SAFETY NET ?
NO
YES
IS PARENT BP DISABLED ?
YES
NO
538
RE-ENABLE PARENT
540
542
SEND EVENT TO UI TO DISPLAY BP

Fig. 5B

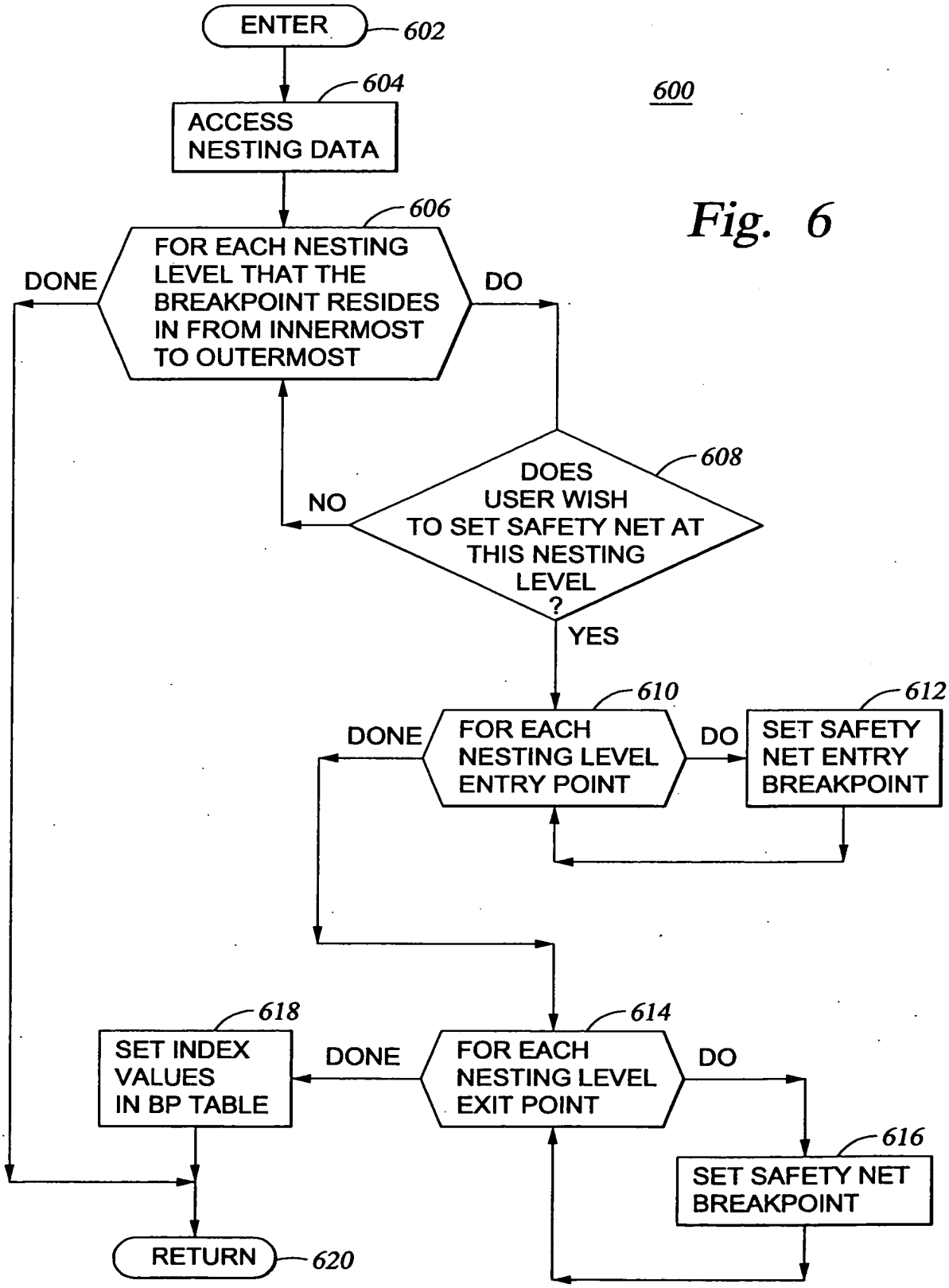

ENTER
602
604
ACCESS NESTING DATA
600
606
FOR EACH NESTING LEVEL THAT THE BREAKPOINT RESIDES IN FROM INNERMOST TO OUTERMOST
DONE
DO
608
DOES USER WISH TO SET SAFETY NET AT THIS NESTING LEVEL ?
NO
YES
610
FOR EACH NESTING LEVEL ENTRY POINT
DONE
DO
612
SET SAFETY NET ENTRY BREAKPOINT
614
FOR EACH NESTING LEVEL EXIT POINT
DONE
DO
618
SET INDEX VALUES IN BP TABLE
616
SET SAFETY NET BREAKPOINT
RETURN
620

Fig. 6

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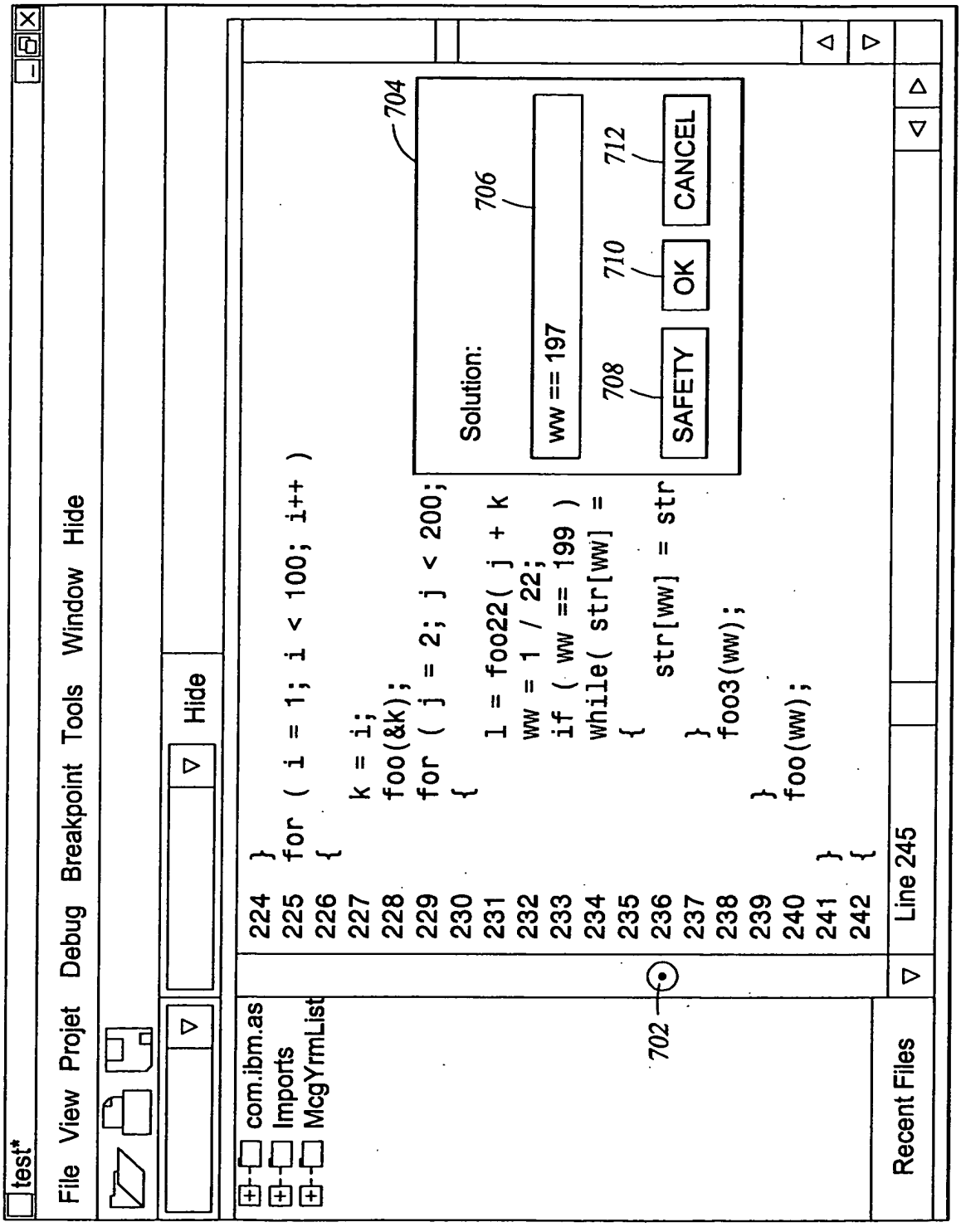

Fig. 7

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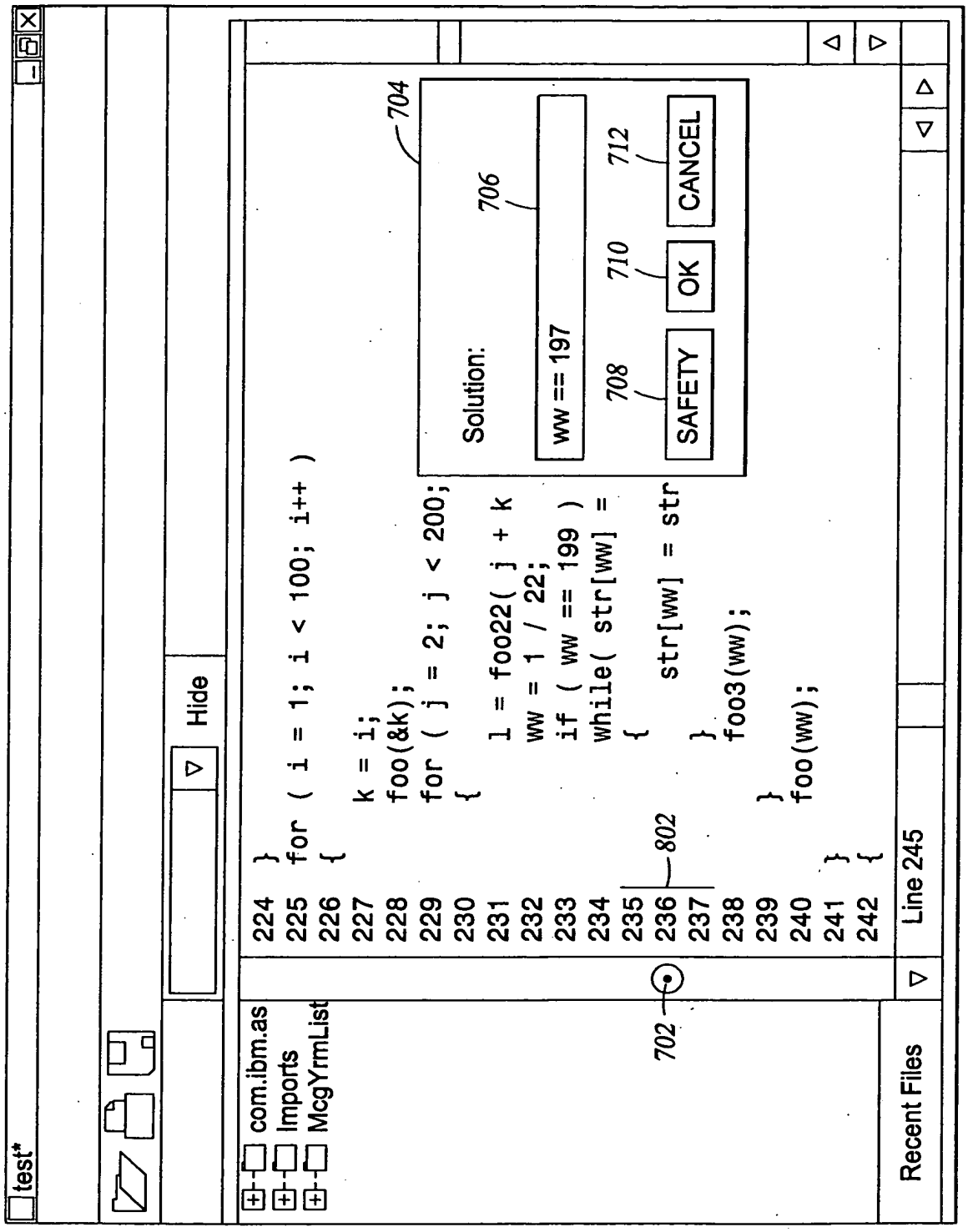

Fig. 8

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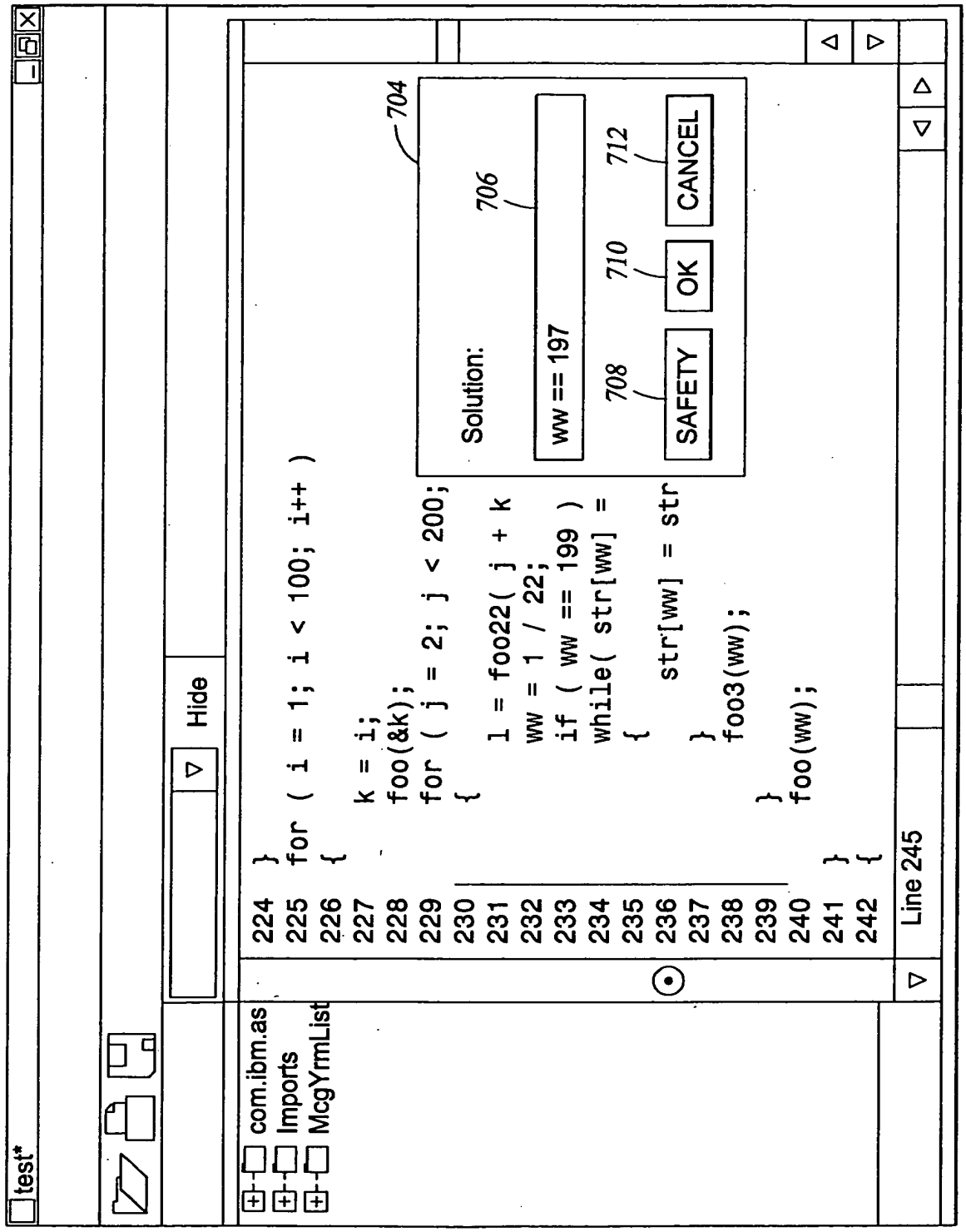
9/10



700

Fig. 9

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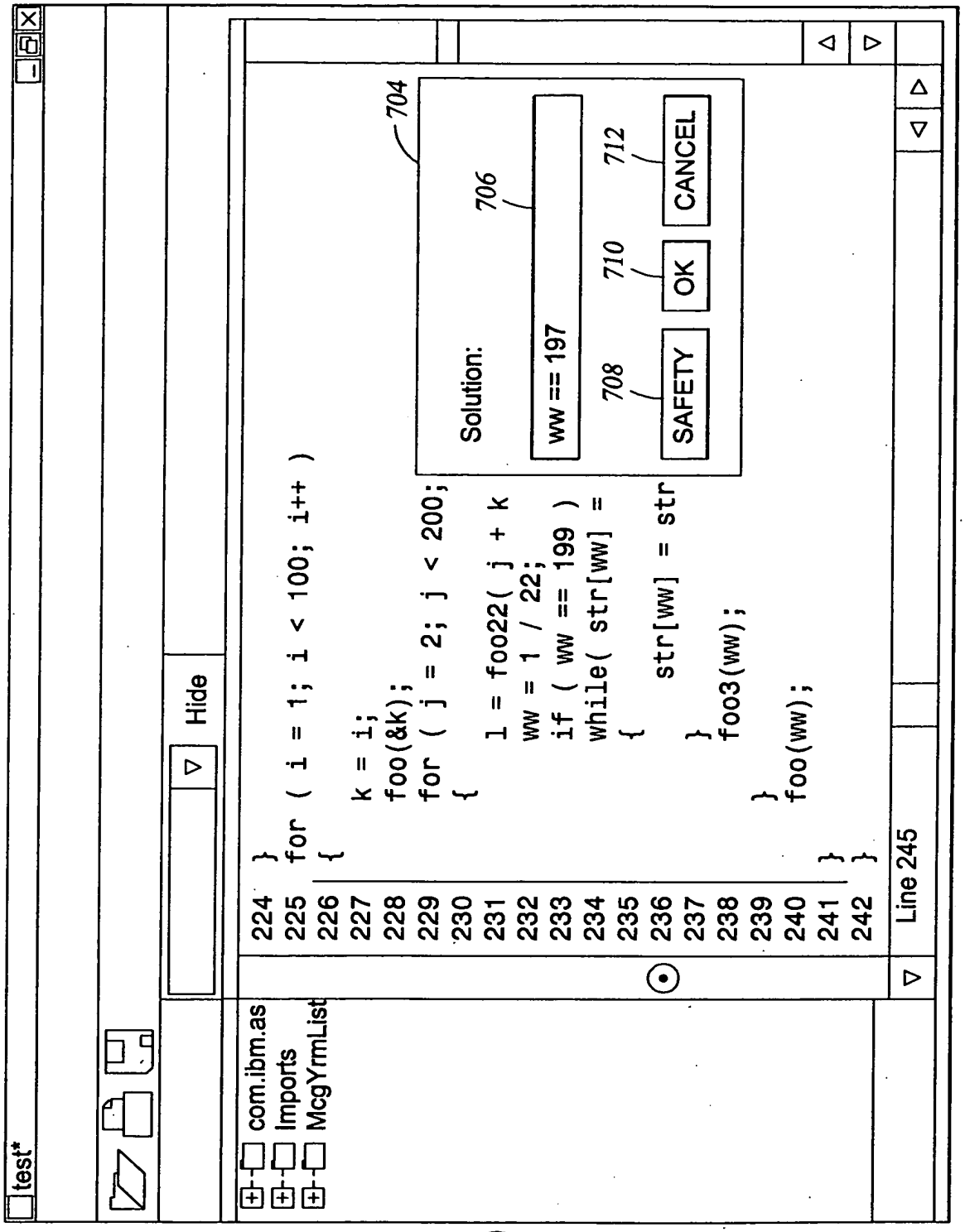
10/10



700

Fig. 10